## **Amendment to the Claims:**

Please amend the Claims as follows and without prejudice. This listing of Claims will replace all prior versions, and listings, of claims in the application.

## **Listing of Claims**

What is claimed is:

- 1. (canceled)
- 2. (previously presented): An ultrasonic transducer comprising:
  - a holder having at least two spaced apart cylindrical surfaces;
  - a cylindrical piezoelectric film spanning between the at least two spaced apart cylindrical surfaces of the holder;
  - an outer electrode segment disposed on an outer surface of the film; and an inner electrode segment disposed on an inner surface of the film;
- a cover spaced from the outer surface of the film, the cover including a flange restricting propagation of the radiating acoustic energy along a propagation path defined along an exterior of the film;

wherein the transducer radiates acoustic energy substantially along a longitudinal axis thereof in response to an excitation voltage applied to the film via the electrode segments.

3. (original) The transducer of claim 2, further comprising a reflector disposed at an end thereof for redirecting the radiating acoustic energy in an opposite direction.

4. (previously presented): An ultrasonic transducer comprising:

a holder having at least two spaced apart cylindrical surfaces;

a cylindrical piezoelectric film spanning between the at least two spaced apart cylindrical surfaces of the holder;

an outer electrode segment disposed on an outer surface of the film;

an inner electrode segment disposed on an inner surface of the film;

a reflector disposed at an end thereof for redirecting the radiating acoustic energy in an opposite direction;

wherein the transducer radiates acoustic energy substantially along a longitudinal axis thereof in response to an excitation voltage applied to the film via the electrode segments.

5. (previously presented): An ultrasonic transducer comprising:

a holder having at least two spaced apart cylindrical surfaces;

a cylindrical piezoelectric film spanning between the at least two spaced apart cylindrical surfaces of the holder;

an outer electrode segment disposed on an outer surface of the film; and an inner electrode segment disposed on an inner surface of the film,

wherein: the at least two spaced apart cylindrical surfaces comprising a plurality of spaced apart cylindrical surfaces;

the film spanning between at least two pairs of the plurality of spaced apart cylindrical surfaces of the holder;

the outer electrode segment comprising a plurality of outer electrode segments; and

the inner electrode segment comprising a plurality of inner electrode segments; and

wherein the transducer radiates acoustic energy substantially along a longitudinal axis thereof in response to an excitation voltage applied to the film via the electrode segments.

- 6. (original) The transducer of claim 5, further comprising a cover spaced from the outer surface of the film, the cover including a flange restricting propagation of the radiating acoustic energy along a propagation path defined along an exterior of the film.
- 7. (original) The transducer of claim 6, further comprising a reflector disposed at an end thereof for redirecting the radiating acoustic energy in an opposite direction.
- 8. (original) The transducer of claim 5, further comprising a reflector disposed at an end thereof for redirecting the radiating acoustic energy in an opposite direction.

## 9-20. (canceled)

- 21, (previously presented) An ultrasonic transducer comprising:
  - a holder having at least two spaced apart cylindrical surfaces;
  - a cylindrical piezoelectric film spanning between the at least two spaced apart cylindrical surfaces of the holder;
  - an outer electrode segment disposed on an outer surface of the film;
  - an inner electrode segment disposed on an inner surface of the film;
  - wherein the transducer radiates acoustic energy substantially along a longitudinal axis thereof in response to an excitation voltage applied to the

film via the electrode segments and wherein the excitation voltage has a frequency which has a wavelength in a propagation medium, and a width of each of the electrode segments is about half of the wavelength.

- 22. (original) The transducer of claim 21, further comprising a drive circuit for sequentially applying the excitation voltage to the electrode segments of the transducer.
- 23. (previously presented): An ultrasonic transducer comprising:
  - a holder having at least two spaced apart cylindrical surfaces;
  - a cylindrical piezoelectric film spanning between the at least two spaced apart cylindrical surfaces of the holder;
  - an outer electrode segment disposed on an outer surface of the film;
  - an inner electrode segment disposed on an inner surface of the film;
  - a drive circuit for sequentially applying an excitation voltage to the electrode segments of the transducer; and
  - wherein the transducer radiates acoustic energy substantially along a longitudinal axis thereof in response to the excitation voltage applied to the film via the electrode segments.
- 24. (original) The transducer of claim 5, wherein the excitation voltage has a frequency which has a wavelength in a propagation medium, wherein about half of the wavelength is more than a width of each of the electrode segments.
- 25. (original) The transducer of claim 24, further comprising a drive circuit for sequentially applying the excitation voltage to the electrode segments of the transducer.

26. (original) The transducer of claim 5, further comprising a drive circuit for sequentially applying the excitation voltage to the electrode segments of the transducer.

27-61 (canceled).

62. (original) The transducer of claim 5, wherein the holder restricts propagation of the radiating acoustic energy along a propagation path defined within an interior of the film.

63-65.(canceled)

- 66. (original) The transducer according to claim 5, wherein the electrode segments have a center to center distance of one-half of a wavelength and the electrode segments are driven such that every other one is driven in-phase with every adjacent electrode segment in opposite phase drive.
- 67. (canceled)
- 68. (previously presented) An ultrasonic transducer comprising:
  - a holder having at least two spaced apart cylindrical surfaces;
  - a cylindrical piezoelectric film spanning between the at least two spaced apart cylindrical surfaces of the holder;
  - an outer electrode segment disposed on an outer surface of the film; and an inner electrode segment disposed on an inner surface of the film;

wherein the transducer radiates acoustic energy substantially along a longitudinal axis thereof in response to an excitation voltage applied to the film via the electrode segments and wherein the excitation voltage has a frequency which has a wavelength in a propagation medium, and a width of each of the electrode segments is about 10 to 20 percent greater that one-half the wavelength.